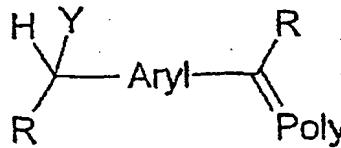
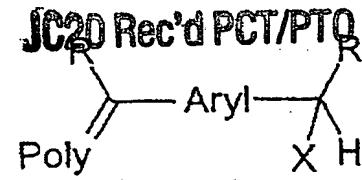


11. Poly(arylenevinylenes) containing at least 0.1 mol% of units of the formula (Ia) and/or (Ib)

JC2D Rec'd PCT/PTO 17 OCT 2005

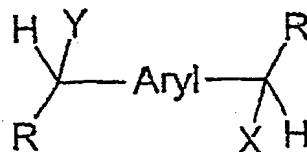


Formula (Ia)



Formula (Ib)

5 obtainable from bis(halomethyl)arylenes or halomethylsulfinylmethylarylenes by base-induced dehydrohalogenation, characterized in that the reaction is carried out in the presence of 0.1-80 mol% of one or more compounds of the formula (I):



Formula (I)

10 where the symbols are defined as follows:

15 Aryl is the same or different at each instance and is a bivalent aromatic or heteroaromatic ring system which has from 2 to 40 carbon atoms and may be unsubstituted, or an R¹-substituted or unsubstituted stilbenylene unit; the two substituents CHXR and CHYR are arranged in such a way that there is an even number of aromatic atoms between them; the aryl and heteroaryl systems may also be part of a larger fused aromatic ring system; the possible substituents R¹ may potentially be situated at any free position;

20 25 R is the same or different at each instance and is an alkyl chain which has from 1 to 40 carbon atoms and may be straight-chain, branched or cyclic, and may also be substituted by one or more R¹ radicals or be unsubstituted, in which one or more nonadjacent carbon atoms may also be replaced by -CR²=CR²-, -C≡C-, -NR²-, -O-, -S-, -CO-, -CO-O-,

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-CONR²-, -O-CO-O-, and one or more hydrogen atoms may also be replaced by fluorine, an aromatic or heteroaromatic ring system which has from 2 to 40 carbon atoms and may be substituted by R¹ or be unsubstituted, an R¹-substituted or unsubstituted stilbenyl or tolanyl unit, -Si(R²)₃, -N(R²)₂, -OR² or a combination of these systems; the aryl and heteroaryl systems may also be part of a larger fused aromatic ring system; the possible substituents may potentially be situated at any free position;

5 X is the same or different at each instance and is Cl, Br, I, trifluoromethanesulfonate or arylsulfonate;

10 Y is the same or different at each instance and is Cl, Br, I, trifluoromethanesulfonate, arylsulfonate, -S(O)-R² or R¹;

15 R¹ is the same or different at each instance and is a straight-chain, branched or cyclic alkyl chain having from 1 to 40 carbon atoms, in which one or more nonadjacent carbon atoms may also be replaced by -CR²=CR²-, -C≡C-, -NR²-, -O-, -S-, -CO-, -CO-O-, -CONR²-, -O-CO-O-, and one or more hydrogen atoms may be replaced by fluorine, an aromatic or heteroaromatic ring system which has from 2 to 40 carbon atoms and may also be substituted by one or more nonaromatic R¹ radicals, a substituted or unsubstituted vinyl group or Cl, F, CN, N(R²)₂, B(R²)₂; the aryl and heteroaryl systems may also be part of a larger fused aromatic ring system; the possible substituents may potentially be situated at any free position; two or more R¹ radicals together may also form a ring system;

20 25 R² is the same or different at each instance and is H, a straight-chain, branched or cyclic alkyl chain having 1 to 22 carbon atoms, in which one or more nonadjacent carbon atoms may also be replaced by -O-, -S-, -CO-O-, -O-CO-O-, and one or more

30 35

hydrogen atoms may also be replaced by fluorine, an aryl or heteroaryl system which has from 2 to 40 carbon atoms and may also be substituted by one or more nonaromatic R¹ and

5 Poly represents a bond to a poly(arylenevinylene) main chain.